

DETAILED ACTION

The instant application 10/539,196 is presented for examination by the examiner. Claims 1, 4-10, 23, 26-32, and 36-39 are pending. Claims 2, 3, 11, 12, 14-22, 24, 25, 33-35, and 40 are canceled. Claims 1, 4-10, 23, 26, 32, and 36-39 were amended on 7/28/09.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Patrick Wamsley on 10/12/09.

The application has been amended as follows:

Claim 32. A receiver circuit, comprising:

demodulation logic generating a first encrypted data stream from an encoded multimedia signal;

first decryption logic configured to perform access control, to decrypt the first encrypted data stream and to generate a first decrypted data stream, the first decryption logic disposed on a first integrated circuit in a processor chip set;

encryption logic configured to re-encrypt the first decrypted data stream and generate therefrom a second encrypted data stream;

second decryption logic decrypting the second encrypted data stream and generating a second decrypted data stream;

decoder logic on a second integrated circuit in the processor chip set, the decoder logic decoding the second decrypted data stream to provide the multimedia signal to a subscriber authorized by the access control; and

a first PCI-Express-compatible interface circuit communicating the first and the second encrypted data stream over a PCI-Express-compatible interconnect by communicating the second encrypted data stream over a dedicated encrypted virtual channel, among a plurality of virtual channels, the plurality of virtual channels comprising at least an unencrypted default virtual channel and a dedicated encrypted virtual channel, supported by the PCI-Express-compatible interconnect, wherein all data sent over the dedicated encrypted virtual channel are encrypted, wherein access control and decoding are performed separately on the first and second integrated circuits for the dedicated encrypted virtual channel.

Response to Amendment

The present claim amendments overcome the previous claim objection, 35 USC 112, and 35 USC 103 rejections.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Applicant's arguments, filed 7/28/09, with respect to claims 1, 23, and 32 have been fully considered and are persuasive. Furthermore, as per claims 1, 23, and 32, the prior art of record is silent in disclosing "a plurality of PCI-Express virtual channels, wherein the plurality of PCI-Express virtual channels comprises at least an unencrypted default virtual channel and a dedicated encrypted virtual channel" in combination with the other claim limitations. These claims require all of the encrypted traffic to travel over the encrypted PCI-express virtual channel. While PCI-express virtual channels are known, the prior art does not implement an end to end encryption protocol as defined in the instant invention.

Allowable Subject Matter

Claims 1, 4-10, 23, 26-32, and 36-39 are allowed.

Art Unit: 2431

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. VAUGHAN whose telephone number is (571)270-7316. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:00pm, EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. V./
Examiner, Art Unit 2431

/William R. Korzuch/
Supervisory Patent Examiner, Art Unit 2431